

Application Serial No. 10/716,341
Response to Restriction Requirement dated July 28, 2005
Reply to Restriction Requirement dated June 30, 2005

Amendments to Claims

This listing of claims will replace all prior versions and listing of claims in the application:

Listing of Claims

1. (original) A dynamic micro-structured reflector comprising:
a substrate having a generally planar major surface; and
a plurality of cavities on the planar major surface, each cavity having at least a first and second sidewalls set at an angle offset from the planar major surface, the first sidewall being a stationary optical face and the second sidewall being a dynamic optical face, the dynamic optical face being deflectable between a first position and a second position;
wherein, the dynamic optical face in the first position redirects more light back to a light source than the dynamic optical face in the second position.
2. (original) The dynamic micro-structured reflector according to claim 1, wherein the dynamic optical face is electrostatically actuated between the first position and the second position.
3. (original) The dynamic micro-structured reflector according to claim 1, wherein substantially the entire dynamic optical face deflects between the first position and the second position.
4. (original) The dynamic micro-structured reflector according to claim 1, wherein each cavity has a depth of 10 microns to 100 microns.
5. (original) The dynamic micro-structured reflector according to claim 1, wherein each cavity has a depth of 30 microns to 50 microns.
6. (original) The dynamic micro-structured reflector according to claim 1, wherein the cavity is a cube-corner structure having two stationary optical faces and one dynamic

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optical face.

7. (original) The dynamic micro-structured reflector according to claim 1, wherein the each dynamic optical face is electrically coupled together.

8. (original) A dynamic micro-structured reflector comprising:
a plurality of cube-corner elements forming a cube-corner array, each cube-corner element having two stationary optical faces and one dynamic optical face, the dynamic optical face being deflectable between a first position and a second position,
wherein, the dynamic optical face in the first position redirects more light back to a light source than the dynamic optical face in the second position.

9. (original) The dynamic micro-structured reflector according to claim 8, wherein the dynamic optical face is electrostatically actuated between the second position and the first position.

10. (original) The dynamic micro-structured reflector according to claim 8, wherein substantially the entire dynamic optical face deflects between the first position and the second position.

11. (original) The dynamic micro-structured reflector according to claim 8, wherein each cube-corner element has a depth of 10 microns to 100 microns.

12. (original) The dynamic micro-structured reflector according to claim 8, wherein each cube-corner element has a depth of 30 microns to 50 microns.

13. (original) The dynamic micro-structured reflector according to claim 8, wherein the cube-corner array is formed in a planar substrate.

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14 - 23. (canceled)

24. (new) A dynamic micro-structured reflector assembly comprising:

a plurality of cube-corner elements forming a cube-corner array, each cube-corner element having two stationary optical faces and one dynamic optical face, the dynamic optical face being deflectable between a first position and a second position, wherein, the dynamic optical face in the first position redirects more light back to a light source than the dynamic optical face in the second position; and

electronics electrically coupled to the plurality of cube corners elements to control the position of at least a portion of the plurality dynamic optical faces of the cube-corner array.

25. (new) The dynamic micro-structured reflector assembly according to claim 24, wherein the dynamic optical face is electrostatically actuated between the second position and the first position by the electronics.

26. (new) The dynamic micro-structured reflector assembly according to claim 24, wherein substantially the entire dynamic optical face deflects between the first position and the second position.

27. (new) The dynamic micro-structured reflector assembly according to claim 24, wherein each cube-corner element has a depth of 10 microns to 100 microns.

28. (new) The dynamic micro-structured reflector assembly according to claim 24, wherein each cube-corner element has a depth of 30 microns to 50 microns.

29. (new) The dynamic micro-structured reflector assembly according to claim 24, wherein the cube-corner array is formed in a planar substrate.

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30. (new) The dynamic micro-structured reflector assembly according to claim 24, wherein the electronics control only a portion of the plurality of dynamic optical faces of the cube-corner array.

31. (new) The dynamic micro-structured reflector assembly according to claim 24, wherein the electronics control all of the plurality of dynamic optical faces of the cube-corner array.

32. (new) The dynamic micro-structured reflector assembly according to claim 24, wherein the electronics control all of the plurality of dynamic optical faces of the cube-corner array separately.

33. (new) The dynamic micro-structured reflector assembly according to claim 24, wherein the electronics control all of the plurality of dynamic optical faces of the cube-corner array in unison.